

IN THE CLAIMS:

Please amend the claims as indicated:

1.-10. (CANCELED)

11. (CURRENTLY AMENDED) A method of thermal management ~~for~~within a vehicle having a gas turbine engine comprising the steps of:

- (1) deoxygenating a fuel onboard the vehicle to provide a deoxygenated fuel;
- (2) communicating the fuel through a first liquid-to-liquid heat exchanger system operable at a first maximum temperature;
- (3) communicating the deoxygenated fuel through a second liquid-to-liquid heat exchanger system operable at a second maximum temperature, said second maximum temperature greater than said first maximum temperature.

12. (ORIGINAL) A method as recited in claim 11, wherein said step (2) further comprises the step of:

communicating the deoxygenated fuel and an oil through the first liquid-to-liquid heat exchanger, the oil effective above approximately 325 degrees Fahrenheit.

13. (ORIGINAL) A method as recited in claim 11, wherein said step (2) further comprises the step of:

communicating the deoxygenated fuel and an oil through the first liquid-to-liquid heat exchanger and preventing the oil from exceeding approximately 325 degrees Fahrenheit.

14. (ORIGINAL) A method as recited in claim 13, further comprises the step of:

communicating the oil through an oil loop in communication with a subsystem which can not exceed approximately 325 degrees Fahrenheit.

15. (ORIGINAL) A method as recited in claim 11, wherein said step (3) further comprises the step of:

communicating the deoxygenated fuel and an oil through the second liquid-to-liquid heat exchanger, the oil effective above approximately 325 degrees Fahrenheit.

16. (ORIGINAL) A method as recited in claim 11, wherein said step (3) further comprises the step of:

communicating the deoxygenated fuel and an oil through the second liquid-to-liquid heat exchanger and permitting the deoxygenated fuel to exceed 325 degrees Fahrenheit.

17. (ORIGINAL) A method as recited in claim 11, wherein said step (1) occurs prior to said step (2).

18. (ORIGINAL) A method as recited in claim 11, further comprises the step of:
communicating the deoxygenated fuel through a fuel pump after said step (2).

19. (ORIGINAL) A method as recited in claim 11, further comprises the step of:
communicating the deoxygenated fuel from the first liquid-to-liquid heat exchanger to the second liquid-to-liquid heat exchanger.

20. (CURRENTLY AMENDED) A method of thermal management within an aircraft fuel system comprising the steps of:

- (1) communicating fuel from an aircraft fuel tank;
- (2) deoxygenating the fuel on-board the aircraft to provide a deoxygenated fuel;
- (3) communicating the fuel through a first liquid-to-liquid heat exchanger system in communication with a first oil loop operable at a first maximum temperature;
- (4) communicating the deoxygenated fuel through a second liquid-to-liquid heat exchanger system in communication with a second oil loop operable at a second maximum temperature after said steps (2) and (3), said second maximum temperature greater than said first maximum temperature.

21. (PREVIOUSLY PRESENTED) A method as recited in claim 20, wherein said step (3) further comprises the steps of:

- (a) communicating the deoxygenated fuel and an oil effective above approximately 325 degrees Fahrenheit in the first oil loop through the first liquid-to-liquid heat exchanger; and
- (b) communicating the oil within the first oil loop with a subsystem which can not exceed approximately 325 degrees Fahrenheit.

22. (PREVIOUSLY PRESENTED) A method as recited in claim 21, wherein said step (b) further comprises the step of:

- (i) communicating the oil within the first oil loop with an aircraft generator subsystem.

23. (PREVIOUSLY PRESENTED) A method as recited in claim 21, wherein said step (b) further comprises the step of:

- (i) communicating the oil within the first oil loop with an engine fan gear subsystem.

~~25~~24. (CURRENTLY AMENDED) A method as recited in claim 21, wherein said step (a) further comprises the step of:

- (i) maintaining the deoxygenated fuel at a temperature below approximately 325 degrees Fahrenheit.

~~26~~25. (CURRENTLY AMENDED) A method as recited in claim 20, further comprising the steps of:

- (5) maintaining the deoxygenated fuel at a temperature below approximately 325 degrees Fahrenheit prior to said step (4); and
- (6) communicating the deoxygenated fuel through a fuel pump prior to said step (4).

~~27~~26. (CURRENTLY AMENDED) A method as recited in claim 20, wherein said step (4) further comprises the steps of:

(a) communicating the deoxygenated fuel and an oil effective above approximately 325 degrees Fahrenheit in the second oil loop through the second liquid-to-liquid heat exchanger; and

(b) communicating the oil within the second oil loop with an aircraft subsystem which operates in excess of approximately 325 degrees Fahrenheit.

~~28~~27. (CURRENTLY AMENDED) A method as recited in ~~claim 27~~claim 26, wherein said step (b) further comprises the step of:

(ii) communicating the oil within the second oil loop with an engine oil loop.

~~29~~28. (CURRENTLY AMENDED) A method as recited in ~~claim 27~~claim 26, further comprising the steps of:

(c) permitting the deoxygenated fuel to exceed a temperature of approximately 325 degrees Fahrenheit.

~~30~~29. (CURRENTLY AMENDED) A method as recited in ~~claim 27~~claim 26, further comprising the steps of:

(c) communicating the deoxygenated fuel through a fuel pump prior to said steps (a) and (b).

~~31~~30. (CURRENTLY AMENDED) A method as recited in claim 20, further comprising the step of:

(5) communicating the deoxygenated fuel to the gas turbine engine during operation of the gas turbine engine after said step (4).

~~32~~31. (CURRENTLY AMENDED) A method of thermal management within an aircraft fuel system comprising the steps of:

(1) deoxygenating the fuel on-board the aircraft to provide a deoxygenated fuel;

(2) communicating the fuel through a first liquid-to-liquid heat exchanger system in communication with a first oil loop operable at a temperature below approximately 325 degrees Fahrenheit; and

(3) communicating the deoxygenated fuel through a second liquid-to-liquid heat exchanger system in communication with a second oil loop operable at a temperature above approximately 325 degrees Fahrenheit after said steps (1) and (2).

~~33~~32. (CURRENTLY AMENDED) A method as recited in ~~claim 32~~claim 31, wherein said step (1) occurs prior to said step (2) such that deoxygenated fuel is ~~communicate~~communicated through the first liquid-to-liquid heat exchanger system.

~~34~~33. (CURRENTLY AMENDED) A method as recited in ~~claim 32~~claim 31 further comprising the step of:

(5) communicating the deoxygenated fuel to the gas turbine engine during operation of the gas turbine engine after said step (3).

~~35~~34. (CURRENTLY AMENDED) A method as recited in ~~claim 32~~claim 31, further comprising the steps of:

(4) communicating the deoxygenated fuel through a fuel pump prior to said step (3).

~~36~~35. (CURRENTLY AMENDED) A method as recited in claim 11 further comprising the step of:

(4) communicating the deoxygenated fuel to the gas turbine engine during operation of the gas turbine engine after said step (3).